

ARGUMENTS/REMARKS

Favorable reconsideration of this Application, in light of the following discussion, is respectfully requested.

This request for Reconsideration is in response to the Office Action mailed on July 31, 2007. Claims 1-7 are pending in the Application. Claims 1-7 are amended. Claim 8 is cancelled. The Applicant would like to thank the Examiner for indication of allowable subject matter in claims 4 and 6.

Summarizing the outstanding Office Action, the Oath/Declaration was noted to be defective for the reasons stated in the Office Action; The drawings were objected to for the reasons indicated by the Examiner; The specification was objected to for reasons stated in the office action; Claim 7 was objected to for reasons stated in the office action; Claims 1-7 were rejected under 35 USC § 112, second paragraph as stated in the office action; Claims 1, 2, 6/1, 6/2, 7/1, 7/2, 7/6/1 and 7/6/2 were rejected under 35 USC § 102(b) as being anticipated by Caubet (US 2002/0061249); Claims 1, 2, 6/1, 6/2, 7/1, 7/2, 7/6/1 and 7/6/2 were rejected under 35 USC § 102(b) as being anticipated by Wheeler (US 4995786); Claims 3, 6/3, 7/3 and 7/6/3 were rejected under 35 USC § 103(a) as being obvious over Wheeler in view of Kronogard (US 4172361); and Claims 5, 6/5, 7/5 and 7/6/5 were rejected under 35 USC § 103(a) as being obvious over either Caubet or Wheeler in view of Weingold (US 5088892).

A new Oath/Declaration is being submitted herewith.

With respect to the drawing objection it is respectfully submitted that the every feature claimed is shown in the drawings. The line (60) to which claims 3, 4 and 5 refer is clearly shown in Figures 1 and 5. This line (60) is defined in the specification as "an at least second degree

curved line". The "at least second degree curved line" (60) includes and represents in the drawings the hyperbolic line in claim 3, the combination parabolic and hyperbolic line of claim 4 and the third degree line of claim 5. Thus, all the features claimed by Applicant are shown in the drawings and the objection should be withdrawn.

The specification is amended to overcome the objections stated in the office action.

Claim 7 is amended to overcome the objections under 37 CFR 1.75(c).

Claim 1 is amended to overcome the rejection of claims 1-7 under 35 USC 112, second paragraph. Claim 8 is cancelled.

Turning to the outstanding rejections, Applicant respectfully traverses the rejection of claims 1, 2, 6/1, 6/2, 7/1, 7/2, 7/6/1 and 7/6/2 under 35 USC § 102(b) because, Caubet does not disclose or suggest that the "substantially 'C'-shaped sections" are "arranged one after another continuously, in the direction of an axis of the shaft along an at least second degree curved line, wherein the at least second degree curved line lies on a surface having an axis orthogonal to the axis of the shaft and also tilted with respect to the base by an angle" as recited in claim 1.

All that Caubet discloses is that the vane can rotate about an axis pivoting by way of its upper pivot (18) between a closed position and an open position, about an axis of rotation (20) oriented radially and inclined by the specified angle with respect to a plane perpendicular to the longitudinal central axis (12) (Para. [0015]). All this paragraph discloses is an orientation of the axis of rotation (20) and nothing more. With respect to the vane (42) Caubet only discloses that the upper end part of the vane (42) is machined with a shape complimentary to that of the spherical pocket (40), thus ensuring constant clearance between this upper part of the vane and the outer wall (34) (Para. [0019]; Fig. 2).

There is absolutely no disclosure in Caubet that the vane sections in Caubet are “arranged one after another continuously, in the direction of an axis of the shaft along an at least second degree curved line, wherein the at least second degree curved line lies on a surface having an axis orthogonal to the axis of the shaft and also tilted with respect to the base by an angle” as recited in claim 1. Thus, claim 1 is not anticipated by Caubet. Claims 2-7 depend from claim 1 and are patentable at least by reason of their respective dependencies.

Applicant also respectfully traverses the rejection of claims 1, 2, 6/1, 6/2, 7/1, 7/2, 7/6/1 and 7/6/2 under 35 USC § 102(b) because, Wheeler does not disclose or suggest that the “substantially ‘C’-shaped sections” are “arranged one after another continuously, in the direction of an axis of the shaft along an at least second degree curved line, wherein the at least second degree curved line lies on a surface having an axis orthogonal to the axis of the shaft and also tilted with respect to the base by an angle” as recited in claim 1.

All that Wheeler discloses with respect to Figure 2 is that the vane (24) has a leading section (36) having an annular extension (38) projected through bushing (39) and outer casing (20) and connected to torque drive arm (40) on the perimeter of the outer casing (Col. 2, L. 46-60). Vane (24) also has a trailing edge section (44) having a stem (46) adapted to fit within leading edge section annular extension (38) and projecting through outer casing (20) (Col. 2,L. 61-65).

All that Wheeler discloses with respect to Figure 4 is that the leading edge section (58) has shaft portion (60) which would extend through the outer casing and which as shown by cross-section 4A--4A of FIG. 4A is annular in shape. The shaft portion has flat (62) at its upper, outer end for attachment of a drive arm. Portion (64) of the section connecting shaft portion (60) to

airfoil portion (66) is essentially semi-circular in shape as shown by cross-section 4B--4B of FIG. 4B. Airfoil portion (66) is slightly cambered in shape as shown by cross-section 4C--4C of FIG. 4C. Portion (68) at the inner end of the vane section is essentially semi-circular in shape as shown by cross-section 4D--4D of FIG. 4D and connects airfoil portion (66) to shaftlike projection (70) which also is essentially semi-circular in shape as shown by cross-section 4E--4E of FIG. 4E. (Col. 3, L. 23-39).

With respect to Figure 5 all Wheeler discloses is that the trailing edge section (74) has stem (76) adapted to fit within annular shaft portion (60) of leading edge section (58) shown in FIG. 4. Stem (76), as shown in cross-section 5F--5F of FIG. 5F, is somewhat less than circular in cross-section since one side, (78), must be flattened to provide clearance, to permit limited rotation of the leading edge section with respect to the trailing edge section of the vane, and permit assembly of the leading and trailing edge sections to form a vane. Flat (80) at the upper, outer end is provided for attachment of a drive arm. Portion (82) of the section connecting stem (76) to airfoil portion (84) is shaped like a sector as shown by cross-section 5G--5G of FIG. 5G to accommodate limited rotational movement of the leading and trailing edge sections. It also provides structural attachment of airfoil portion (84) to the stem and "fills" the flowpath on the inner surface of the outer casing. Airfoil portion (84) is cambered in shape as shown by cross-section 5H--5H of FIG. 5H. (Col. 3, L. 40 – Col. 4, L. 4).

There is no absolutely no disclosure whatsoever with respect to Figures 2, 4 or 5 nor anywhere else in Wheeler that the sections of the vane are "arranged one after another continuously, in the direction of an axis of the shaft along an at least second degree curved line, wherein the at least second degree curved line lies on a surface having an axis orthogonal to the axis of the shaft and also tilted with respect to the base by an angle" as recited in Applicant's

claim 1. Therefore, claim 1 is not anticipated by Wheeler. Claims 2-7 depend from claim 1 and are patentable at least by reason of their respective dependencies.

Applicant respectfully traverses the rejection of claims 3, 6/3, 7/3 and 7/6/3 under 35 USC § 103(a) because, the combination of Wheeler and Kronogard does not disclose or suggest all the features of Applicant's claims. Claims 3, 6/3, 7/3 and 7/6/3 depend from claim 1, which for the reasons described above is not anticipated by Wheeler. As described above, Wheeler does not disclose or suggest that the "substantially 'C'-shaped sections" are "arranged one after another continuously, in the direction of an axis of the shaft along an at least second degree curved line, wherein the at least second degree curved line lies on a surface having an axis orthogonal to the axis of the shaft and also tilted with respect to the base by an angle" as recited in claim 1. Thus, the combination of Wheeler and Kronogard cannot disclose the features of Applicant's claim 1 as well. Therefore, claims 3, 6/3, 7/3 and 7/6/3 are patentable at least by reason of their respective dependencies.

Further, claim 3 recites that the curved line is a hyperbolic line. This feature is not disclosed in Kronogard. With respect to Figure 4, Kronogard merely discloses that the individual guide vane includes a nose portion (40), which is angularly adjustable, and a stationary tail portion (41). The leading edge (42) of the guide vane is here designed in such a manner that it is inclined in the direction of gas flow from the radially inward part, as well as from the outward part. This arrangement makes possible big angles of inclination, while maintaining the strength of the vane, resulting in a high reduction of flow losses, even during considerable angular variations in the direction of gas flow. (Col. 3, L. 1-11). Nowhere does Kronogard disclose that

“the curved line is a hyperbolic line” as recited in Applicant’s claim 3. Thus, claim 3 is patentable for this additional reason.

Applicant respectfully traverses the rejection of claims 5, 6/5, 7/5 and 7/6/5 under 35 USC § 103(a) because, the combination of either Caubet or Wheeler and Weingold does not disclose or suggest all the features of Applicant’s claims. Claims 5, 6/5, 7/5 and 7/6/5 depend from claim 1, which for the reasons described above is not anticipated by either Caubet or Wheeler. As described above, neither Caubet nor Wheeler disclose or suggest that the “substantially ‘C’-shaped sections” are “arranged one after another continuously, in the direction of an axis of the shaft along an at least second degree curved line, wherein the at least second degree curved line lies on a surface having an axis orthogonal to the axis of the shaft and also tilted with respect to the base by an angle” as recited in Applicant’s claim 1. Thus, the combination of either Caubet or Wheeler and Weingold cannot disclose the features of Applicant’s claim 1 as well. Therefore, claims 5, 6/5, 7/5 and 7/6/5 are patentable at least by reason of their respective dependencies.

Consequently, in view of the above remarks, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. A Notice of Allowance for claims 1-7 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicant's undersigned representatives at the below listed telephone number.

Respectfully submitted,

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